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January 25, 2001

RSPA-1998-4309-18 12124-M
#39665

RECEIVED
01 JAN 25 PM 2:19

GOVERNMENT
EXEMPTIONS & APPROVALS
01 JAN 25 PM 1:35

Mr. Robert A. McGuire
Acting Associate Administrator for
Hazardous Material Safety
Research & Special Programs Administration
U.S. Department of Transportation
400 7th Street, SW
Washington, DC 20590-0001

Attn: Exemptions, DHM-31

Ref: Request for Modification of Exemption DOT-E12124 (Third Revision)

Dear Mr. McGuire:

Albemarle Corporation requests modification of DOT-E12124 (Third Revision) which will expire on September 30, 2002. This request is made in accordance with 49 CFR 107.113.

1. Exemption to be Modified

DOT-E12124 is an exemption from parts of 49CFR173.242 in that a non-DOT specification portable tank is authorized; §178.245-1(c) in that all openings are not grouped in one location; and § 178.245-1(d)(4) in that the tank is not in a full framework for containerization and to allow a bottom discharge opening with no internal stop-valve.

2. Applicant

Albemarle Corporation
451 Florida Street
Baton Rouge, LA 70801
Contact: Jack E. Helms
Phone: 225-388-7752
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E-mail: jack_helms@albemarle.com

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3. Modification Requested

We request that Paragraph 6 be modified to add one additional hazardous material:

Water-reactive solid, corrosive, n.o.s., 4.3, UN 3131, PG I

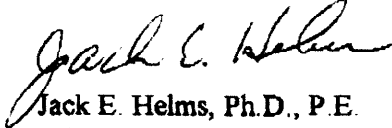
This properties of this material are similar to the properties of UN 3207 and UN 2813 that DOT has already approved for shipment under this exemption. This material presents no greater hazard than the materials that DOT has already approved under this exemption.

4. Certification

We certify that the descriptions, technical information and safety assessments submitted with the original application, and subsequent corrections remain accurate and correct. This exemption continues to provide a level of safety consistent with the public interest in adequately protecting against risks to life and property during transportation.

If any opposition is registered, we request copies of such filings subject to your fee schedule. If such filings are made, we request the opportunity of an informal discussion with your staff.

Yours very truly,


Jack E. Helms, Ph.D., P.E.
Advisor, Transportation

cc: L.P. Bouquet
W.D. Eby
P. Quinn - HMT Associates, Inc.

SAFETY DATA SHEET
Development Catalyst Fe 6
NC 235 3.00 GB EN

1. PRODUCT AND COMPANY IDENTIFICATION

MSDS Code	NC235
Trade Name	Development Catalyst Fe 6
Manufacturer/Supplier	BP Chemicals Ltd
Address	Research and Engineering Centre Chertsey Road Sunbury-on-Thames TW16 7LN
Phone Number	+44 (0) 1932-774077
Fax Number	+44 (0) 1932-774176
Emergency Phone Number	+44 (0)1482-886251

2. COMPOSITION/INFORMATION ON THE COMPONENTS

Product Formal Name	Development Catalyst Fe 6
Product Chemical Family	Preparation
CAS Number	Not applicable.
Hazardous Components in Product	bis pyridine iron (II) complex: Caution - substance not yet fully tested. Methylaluminoxane < = 25% R14/15, R17, R35
Information on composition	Mixture of amorphous silica with aluminium alkyl and bis pyridine iron (II) complex. bis pyridine iron (II) complex: Caution - substance not yet fully tested. Contact with water or moisture may lead to the formation of the following hazardous degradation products: 2,4,6-trimethylaniline: Xn, R22, R36/37/38 2,6-diacylpyridine: Xi, R36/37/38

3. HAZARD IDENTIFICATION

Main Hazards	*** Revision starts- Reacts violently with water, liberating extremely flammable gases. Causes burns. -Revision Ends*** Available information suggests that the aqueous degradation product 2,4,6-trimethyl aniline should be handled as a suspect carcinogen
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4. FIRST AID MEASURES

First Aid - Eyes	Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention urgently.
First Aid - Skin	Immediately flood the skin with large quantities of water, preferably under a shower. Remove contaminated clothing as washing proceeds. Obtain medical attention urgently.
First Aid - Ingestion	Wash out mouth with water. Do not induce vomiting. Give sips of cold water or milk to soothe the affected parts. Obtain medical attention urgently.
First Aid - Inhalation	Remove from exposure. Keep warm and at rest. If there is difficulty in breathing, give oxygen. Obtain medical attention urgently. Apply artificial respiration (cardio-pulmonary resuscitation) only if the patient has stopped breathing.

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Advice to Physicians

Treat skin burns conventionally.

Inhalation of aluminium oxide fume from this product may result in metal fume fever. Typically, metal fume fever has onset 4-8 hours after exposure and lasts 12-48 hours. Thirst and metallic taste usually precede onset of chills, fever, cough, sweating, myalgia, headache, weakness, dyspnoea and nausea. Metal fume fever is a self-limiting syndrome. Rarely, pulmonary oedema occurs.

5. FIRE FIGHTING MEASURES

Extinguishing Media

Extinguish with dry powder, vermiculite or dry sand.
Fire blanket may be used on small fires.

Unsuitable Extinguishing Media

DO NOT USE water, water-based foams, chemical-based foams, CO2 and halon extinguishers should not be used.

Special Hazards of Product

May form explosive mixtures with air.
Spilled product covered with sand or other inert material is still reactive and may reignite.

Protective Equipment for Fire-Fighting

Fire fighters should wear full chemical protection suit and self-contained breathing apparatus (SCBA)

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Wear inherently Fire Resisting (IFR) clothing, leather gloves, chemical goggles and safety helmet with full face shield. Wear self-contained breathing apparatus.
Only personnel equipped with suitable protective equipment may deal with spillage or loss of containment of this product. Personnel should stay upwind of spill. Mark out the contaminated area with signs and prevent access to unauthorised personnel.

Environmental Precautions

Try to prevent the material from entering drains or water courses. Advise Authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.
Prevent spread of material by use of temporary bund or impervious barrier

Spillages

Spillages will create a fire hazard.
Extinguish any fire with dry powder.
Cover with dry sand or vermiculite. Try to prevent the material from entering drains or water courses. Avoid creating a dust. Take precautionary measures against static discharges.
Allow reaction with air to complete and then remove residues. Transfer into suitable closed containers for disposal.

7. HANDLING AND STORAGE

Handling

Avoid contact with air or water.
Avoid contact with eyes, skin and clothing.
Emergency shower and eye wash facilities should be readily available.
Avoid creating a dust.

Storage

When handling in bulk, the possibility of dust explosion should be considered. If the risk is significant, mechanical handling equipment must be earthed and provided with explosion venting. Take precautionary measures against static discharges.
Store under a nitrogen blanket.
Storage area should be: well ventilated.
Store away from sources of heat or ignition.
Storage and transfer equipment should be adequately earthed and bonded to prevent the accumulation of static charges.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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Occupational Exposure Standards

amorphous silica
Dust, respirable:
UK EH40: OES 3mg/m3 8h TWA.

Dust, total inhalable:
UK EH40: OES 6mg/m3 8h TWA.

Aluminium alkyl compounds:
UK EH40: OES 2mg/m3 8h TWA.

ACGIH Occupational Exposure Standards

amorphous silica
ACGIH: TLV 10mg/m3 8h TWA.

Aluminium alkyls (not otherwise classified):
ACGIH: TLV 2mg/m3 8h TWA. (as Al)

France: Occupational Exposure Standards

***Revision Starts:-
Dust, respirable:
TLV: 5 mg/m3 8h TWA

Total dust:
TLV: 10 mg/m3 8h TWA -: Revision Ends***

Aluminium (alkyl compounds).
TLV: 2mg/m3 8h TWA

Engineering Control Measures
Respiratory Protection
Hand Protection
Eye Protection
Body Protection

Handle only in totally enclosed systems under nitrogen.

Air supplied breathing apparatus.

Flame resistant protective gloves.

Chemical goggles and face shield.

(I) For handling small quantities (up to 10g) inside research laboratories use safety glasses and Inherently Flame Resistant (IFR) laboratory coats.

(II) For all other locations and greater quantities of material use full protective clothing consisting of:- IFR one or two piece overall, gloves, chemical goggles and safety helmet with face shield will be worn.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Powder Particle size approximately 50µm diameter

Colour

beige-tan

Solubility in Water (kg/m3)

Reacts violently.

Density (Kg/m3)

Approximately 350

10. STABILITY AND REACTIVITY

Stability * Revision starts -**

Reacts violently with: water. Halocarbons. Carbon tetrachloride. Chloroform. Oxidising agents.

Reacts explosively with: isopropanol, methanol, Ethanol.

Reacts vigorously with: tertiary butanol.

Reaction with oxygen or oxygen rich atmospheres (>21% oxygen) is explosive.

***. Revision Ends

Conditions to Avoid
Materials to Avoid

Exposure to air or oxygen. Exposure to water or moisture. Static discharge.
Acids. Bases. Halogens. Alcohols.

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Hazardous Decomposition Products

Thermal decomposition may release:

oxides of carbon and nitrogen.

Highly flammable gasses (olefins, alkanes, hydrogen) which may form explosive mixtures with air.

Aerosolised aluminium oxide fumes giving possibility of metal fume fever.

Reaction with water or moist air may produce:
Highly flammable gasses (olefins, alkanes, hydrogen)

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

No specific data is available. Reactivity in air and water precludes testing.

Human Data

-Data on the individual components: (aqueous degradation product) 2,4,6-trimethylaniline, Oral LD50 (rat) 743mg/kg
Contact with product will cause severe burns, even through clothing or polyethylene sheet. Exposure to aluminium alkyl fumes has been reported to cause eye irritation. Inhalation of freshly formed metal oxide fume is associated with metal fume fever.

Additional Data

Contains novel bis pyridine iron (II) complex.
Caution - substance not yet fully tested.
The aqueous degradation product 2,4,6-trimethylaniline has shown genotoxic activity in some genetic toxicology tests. Because of this, and because it has an aromatic amine structure, it should be considered as a suspect carcinogen.-

12. ECOLOGICAL INFORMATION

Ecotoxicity

No specific data is available. Reactivity in air and water precludes testing.

13. DISPOSAL

Product Disposal

Unused product should be diluted to less than 10% aluminium alkyl content in dry hydrocarbon (eg gasoline or diesel) and stored under nitrogen. Specialist incineration is the usual route of disposal.

Dispose of in accordance with all applicable local and national regulations. Use an approved disposal company.

Container Disposal

Containers should be rinsed with dry hydrocarbon.

To dispose of container washings: Specialist incineration is the usual route of disposal.

14. TRANSPORT INFORMATION

***** Revision Starts-**

UK Transport Information

UK Transport - Class. 4.3

UN Number

3131

Proper Shipping Name

Water reactive solid,corrosive, n.o.s. (contains methyl aluminoxane)

UN Class

4.3

Packaging Group

I

ADR/RID Substance

3131

Identification Number

4.3

ADR/RID - Class

24(a)

ADR/RID - Item No.

4.3

IMDG - Class

No

IMDG - Marine Pollutant

4.3-08

IMDG - Ems Number

760

IMDG - MFAG Table Number

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IATA - Class	4.3
IATA - Subsidiary risks	8
Tremcard No. TEC(R)	43G17

- Revision Ends***

15. REGULATORY INFORMATION

Labelling Information



Corrosive



Highly Flammable

R phrases

Caution: Substance not fully tested.

*** Revision Starts - R14/15: Reacts violently with water, liberating extremely flammable gases.

R35: Causes serious burns. -Revision Ends***

S phrases

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S6: Keep under: nitrogen.

S7/8: Keep container tightly closed and dry.

S30: Never add water to this product.

S16: Keep away from sources of ignition - No Smoking.

S43: In case of fire use:

dry powder (BC powder)

vermiculite

dry sand

never use water

S25: Avoid contact with eyes.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S22: Do not breathe dust.

16. OTHER INFORMATION

MSDS first issued

5 January 1999

MSDS data revised

15 November 1999

Inserted 1 November 1999 : Revisions in sections 3, 10, 15

Inserted 15 November 1999 : Revisions in sections 8 and 14

Uses and Restrictions

For research and development use only. This product must only be handled by skilled personnel. Use in a closed system. In the USA this material is restricted to research and development use only as component(s) may not be listed on Toxic Substances Control Act Inventory. Component(s) of this material may need notification as new substances under the EU Dangerous Substances Directive (87/548/EEC)

Notice

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